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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,919	12/07/2001	Timothy M. Gage	M-11998 US	6158

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EXAMINER	
AILES, BENJAMIN A	
ART UNIT	**PAPER NUMBER**
2142	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/010,919	GAGE ET AL.	
	Examiner	Art Unit	
	Benjamin A. Ailes	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the Amendment filed 08 July 2005.

2. Claims 1-65 remain pending.

Claim Objections

3. Amendments to claims 31 and 55 made by applicant have been entered into the record. Prior objections to claims 31 and 55 has been withdrawn.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-65 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogier (2003/0095504), hereinafter referred to as Ogier.

6. Regarding claims 1, 21, 36, and 51, Ogier discloses a method of establishing bi-directional connectivity of a network element in a network, the method comprising:

receiving a first unreliable packet from said network element (para. 0227, lines 1-9);

storing an address of said network element in a neighbor pending list (para. 0220-0221);

sending a reliable packet to said network element (para. 0219); and

if an acknowledgement to said reliable packet is received from said network element, accepting said network element as a neighbor (para. 0231).

7. Regarding claims 2, 22, 37, and 52, in accordance with claims 1, 21, 36, and 51 respectively, Ogier discloses the method wherein said unreliable packet does not require a response (para. 0219).

8. Regarding claims 3, 23, 38, and 53, in accordance with claims 1, 21, 36, and 51, respectively, Ogier discloses the method wherein said reliable packet requires a response (para. 0227).

9. Regarding claims 4, 24, 39, and 54, in accordance with claims 1, 21, 36, and 51, respectively, Ogier discloses the method wherein said accepting said network element as neighbor is done by moving said address of said network element from said neighbor pending list to a neighbor list (para. 0231).

10. Regarding claims 5, 25, 40, and 55 in accordance with claims 4, 24, 39, and 54, respectively, Ogier discloses the method further comprising:

if said address of said network element is in said neighbor list, updating a neighbor hold count for said network element (para. 0232, lines 1-6).

11. Regarding claims 6, 26, 41, 56, in accordance with claims 1, 21, 36, and 51, respectively, Ogier discloses the method further comprising:

determining if said address of said network element is in a dampening list (para. 0230).

12. Regarding claims 7, 27, 42, and 57, in accordance with claims 6, 26, 41, and 56, respectively, Ogier discloses the method further comprising:

if said address of said network element is in said dampening list, updating a value of a reliability count of said network element to reflect higher reliability of said network element (para. 0230).

13. Regarding claims 8, 28, 43, and 58, in accordance with claims 7, 27, 42, and 57, respectively, Ogier discloses the method further comprising:

if said value of said reliability count is a maximum value, updating a value of a reliability count of said network element to reflect higher reliability of said network element (para. 0230).

14. Regarding claims 9, 29, 44, and 59, in accordance with claims 8, 28, 43, and 58, respectively, Ogier discloses the method wherein said maximum value is predetermined (para. 0208, lines 1-7).

15. Regarding claims 10, 30, 45, and 60 in accordance with claims 8, 28, 43, and 58, respectively, Ogier discloses the method wherein said maximum value is dynamically adjusted... (para. 0219).

16. Regarding claims 11, 31, 46, and 61 in accordance with claims 6, 26, 41, and 56, respectively, Ogier discloses the method further comprising:

if said network element is not in said dampening list, adding said address of said network element to said dampening list, and setting said value of said reliability count of said network element to said maximum value (para. 0230).

17. Regarding claims 12, 32, 47, and 62, in accordance with claims 11, 31, 46, and 61, respectively, Ogier discloses the method further comprising:

setting said neighbor hold count for said network element (para. 0230); and

sending a second unreliable packet to said network element (para. 0219).

18. Regarding claims 13, 33, 48, and 63, in accordance with claims 1, 31, 36, and 51, respectively, Ogier discloses the method further comprising:

initiating a neighbor pending timer (para. 0212).

19. Regarding claims 14, 34, 49, and 64, in accordance with claims 12, 32, 47, and 62, respectively, Ogier discloses the method further comprising:

if said acknowledgement to said reliable packet is not received before said neighbor pending timer expires, removing said address of said network element from said neighbor pending list, and updating said value of said reliability count to reflect lower reliability of said network element (para. 0227, lines 18-23).

20. Regarding claims 15, 35, 50, and 65, in accordance with claims 12, 32, 47, 62, respectively, Ogier discloses the method further comprising:

if said acknowledgement to said reliable packet is received before said neighbor pending timer expires, (para. 0227),

moving said address of said network element from said neighbor pending list to said neighbor list, and (para. 0231), and

removing said address of said network element from said dampening list (para. 0231).

21. Regarding claim 16, Ogier discloses a system for establishing bi-directional connectivity with a network element in a network comprising:

a central processing module (para. 0034); and

a neighbor pending list coupled to said central processing module, wherein said central processing module is configured to store an address of said network element in said neighbor pending list while said network element is in a process of establishing said bi-directional connectivity with said system (para. 0005).

22. Regarding claim 17, in accordance with claim 16, Ogier discloses the system further comprising:

an input-output module coupled to said central processing module, wherein said input-output module is configured to provide input-output interface to said central processing module (para. 0034); and

a counter module coupled to said central processing module, wherein said counter module is configured to provide at least one of timing and counting functionality to said central processing module (para. 0196).

23. Regarding claim 18, in accordance with claim 16, Ogier discloses the system further comprising:

a neighbor list coupled to said central processing module, wherein said neighbor list is configured to store said address of said network element after said bi-directional connectivity is established with said network element (para. 0210); and

a dampening list coupled to said central processing module, wherein said dampening list is configured to store said address of said network element when a value of a reliability count in said counter module is lower than a maximum value (para. 0210 and 0230).

24. Regarding claim 19, in accordance with claim 18, Ogier discloses the system wherein said maximum value is predetermined (para. 0208, lines 1-7).

25. Regarding claim 20, in accordance with claim 18, Ogier discloses the system wherein said maximum value is dynamically adjusted according to a traffic condition in said network (para. 0219).

Response to Arguments

26. Applicant's arguments filed 08 July 2005 have been fully considered but they are not persuasive.

27. Examiner would like to point out that claim elements were not "omitted" as assumed by applicants on page 15, paragraph 1 of the response. Applicant assumes that the Examiner did not "in any way acknowledge" the remainder of claim elements. However, due to the length of the claims and in the interest of time, Examiner used ellipses (...) in a way to acknowledge and to show that the rest of the claim limitations were being considered but not being completely typed out. Therefore, the Examiner did acknowledge the remainder of the claim elements and in no way ignored or omitted claim limitations. In this response, the Examiner has chosen to expand all claim limitations so that the applicant will no longer be confused over what is being considered and what is being "omitted." The Examiner would like to remind applicant that no claim elements were "omitted" and that ALL claim limitations have been considered.

28. (A) Applicant argues: "Applicants are unable to find disclosed anywhere in the cited portion of Ogier, and indeed are unable to find disclosed anywhere in Ogier, the claimed first unreliable packet."

29. As to point (A), the Examiner respectfully disagrees with the Applicants' position. Applicant is reminded that Examiners are to take the broadest reasonable interpretation when performing the examination of claims. For purposes of interpretation and when reading the claim as written, the unreliable packet is deemed to be just a packet in any type of network. Due to the fact that the "unreliable packet" is considered by the Examiner to be undefined (i.e. lack of protocol use, environment use), the types of packets used by Ogier are deemed to be the same

types of packets. Ogier clearly discloses the environment wherein a new node on the network submits packets into the network in order to be discovered by neighbor nodes.

30. (B) Applicant argues: "Applicants are unable to find disclosed anywhere in the cited portion of Ogier, and indeed are unable to find disclosed anywhere in Ogier, the claimed neighbor pending list."

31. As to point (B), the Examiner respectfully disagrees with the Applicants' position. When taking the broadest reasonable interpretation of the use of a "neighbor pending list," the Examiner cites the fact that Ogier discloses the same type of data structure wherein neighbor nodes are kept in a data structure list and which have not yet been confirmed to being actual neighbor nodes (see Ogier, paragraphs 0220-0223).

32. (C) Applicant argues: "Applicants are unable to find disclosed anywhere in the cited portion of Ogier, and indeed are unable to find disclosed anywhere in Ogier, the claimed sending of a reliable packet."

33. As to point (C), the Examiner respectfully disagrees with the Applicants' position essentially for the same reason set forth in point (A).

34. (D) Applicant argues: "Applicants are unable to find disclosed anywhere in the cited portion of Ogier, and indeed are unable to find disclosed anywhere in Ogier, the claimed determination as to whether or not an acknowledgement to a reliable packet is received, as well as the act of accepting said network element as a neighbor."

35. As to point (D), the Examiner respectfully disagrees with the Applicants' position. First the Examiner would like to point out to the applicant that the fourth claim element, "if an acknowledgement to said reliable packet is received from said network element, accepting said

network element as a neighbor", is deemed a conditional statement and it is unclear whether or not this limitation is actually required by the invention. In light of this fact, this limitation is not deemed requirement for the invention to be implemented. For arguments sake, in the case that this claim limitation is required by the invention, the Examiner points out that fact that in Ogier, when a HELLO acknowledgement is received and a symmetric connection is established, two nodes then become neighbors in the network. This is deemed to be the same as applicant's claim limitation of becoming (accepting) a network node (element) as a neighbor.

36. (E) Applicant argues: "Ogier fails to disclose, and even to contemplate, the use of a neighbor pending list."

37. As to point (E), the Examiner respectfully disagrees with the Applicants' position essentially for the same reason set forth in point (B).

Conclusion

38. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Elliot (U.S. 6,456,599) discloses the distribution of potential neighbor information through an ad hoc network.

Saleh et al. (U.S. 6,856,627) disclose a method for routing information over a network.

39. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

baa

Beatriz Prieto

BEATRIZ PRIETO
PRIMARY EXAMINER